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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	10/600,382	CRAGUN ET AL.					
Office Action Summary	Examiner	Art Unit					
	Tomasz Ponikiewski	2165					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period was pailure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 06/09	9/2006 & Approved TD.						
2a)⊠ This action is <b>FINAL</b> . 2b)☐ This	This action is <b>FINAL</b> . 2b) This action is non-final.						
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.					
Disposition of Claims							
4) ⊠ Claim(s) 1,3-27 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1, 3-27 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or	vn from consideration.						
Application Papers							
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	epted or b) objected to by the I drawing(s) be held in abeyance. See ion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	4)						
Paper No(s)/Mail Date	6) Other:	•					

### **DETAILED ACTION**

- 1. The Amendment filed on June 6, 2006 has been received and entered. Claim 2 has been canceled therefore claims 1, 3-27 are pending.
- 2. Applicant's amendment has overcome previous claim objections and rejection under 112 2<sup>nd</sup> and 101.

### Terminal Disclaimer

3. The terminal disclaimer filed on 06/09/2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of any patent granted on Application Number 10/691287 has been reviewed and is accepted. The terminal disclaimer has been recorded.

## Claim Objections

4. Claim 20 objected to because of the following informalities:

Claim 20 recite the word "for storing" and "for mapping" in the claim. It indicates intended use and as such does not carry patentable weight. The word could be changed to recite "to". The limitations following the phrase "for" describes only intended use but not necessarily required functionality of the claim. Limitations following the phrase "for" do not carry patentable weight, which cause the claims to appear as a

Application/Control Number: 10/600,382 Page 3

Art Unit: 2165

series of non-functional descriptive material/data without any functional relation with each other. Applicant is required to amend the claims so that the claim limitations are recited in a definite form. For example, claim 20 recites "database for storing" should be "database to store" or "database that stores".

Claim 20 recites the word "for managing annotations for different type objects" in the preamble. There is no nexus between preamble and the body of claim because "for" is intended use never having to be realized and body of the claim doesn't recite the intended use of "managing annotations".

## Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claim 20 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The preamble of claim 20 recite "system for" which is intended use. To overcome this type of rejection, claim should be amended to recite definite functionality such as "system to".

Claim Rejections - 35 USC § 103

Application/Control Number: 10/600,382 Page 4

Art Unit: 2165

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 1, 3-4, 10 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vogel (US Patent 6,665,681) in view of Sommerer et al. (US 2004/0205514 A1).

As per claim 1 <u>Vogel</u> is directed to a computer implemented method comprising:

creating an annotation corresponding to a first data object identified by a

first plurality of identifying parameters that identify a location of the first data object

creating an index for the first data object, the index comprising one or more index values, each generated based on one or more of the first plurality of identifying parameters (column 2, lines 14-17, wherein "index" means "topical library");

(column 4, lines 13-16, wherein "reference" means "topography");

<u>Vogel</u> does not teach creating a record containing the reference and the index for the first data object.

Sommerer teaches creating a record containing the reference and the index for the first data object (page 5, paragraph 0049, lines 3-12).

It would have been obvious to one of ordinary skill in the art at the time the in invention was made to combine the teachings of <u>Vogel</u> with those of <u>Sommerer</u> to

Art Unit: 2165

creating a record containing the reference and the index for the first data object because keeping the path or URL of a given object (information) is necessary to retrieve it.

As per claim 3 <u>Vogel</u> as modified is directed to a number of the index values is greater than a number of the first plurality of identifying parameters (column 2, lines 14-17, wherein "index" means "topical library").

As per claim 4 <u>Vogel</u> as modified is directed to creating the index for the first data object comprises:

classifying the first data object based on the first plurality of identifying parameters (column 1, lines 36-38);

selecting a first mapping, from a plurality of mappings, based on the classification of the first data object (column 2, lines 17-23);

and converting the first plurality of identifying parameters to one or more of the index values, as specified in the first mapping (column 2, line 13-26).

As per claim 10 <u>Vogel</u> is directed to a computer implemented method of managing annotations for a plurality of different type data objects, comprising:

receiving a set of parameters identifying an annotated data object, wherein the identifying parameters identify locations of the annotated data object (column 3, lines 26-30);

Art Unit: 2165

selecting, based on the set of identifying parameters, a mapping from a plurality of mappings, each containing a different set of mapping functions (column 2, lines 17-23);

<u>Vogel</u> does not teach creating an index for the annotated data object by mapping the identifying parameters to columns in an index table, as specified by the mapping functions of the selected mapping.

Sommerer teaches creating an index for the annotated data object by mapping the identifying parameters to columns in an index table, as specified by the mapping functions of the selected mapping (page 5, paragraph 0049, lines 3-12; page 7, paragraph 0076, lines 12-14).

It would have been obvious to one of ordinary skill in the art at the time the in invention was made to combine the teachings of <u>Vogel</u> with those of <u>Sommerer</u> to create an index for the annotated data object by mapping the identifying parameters to columns in an index table, as specified by the mapping functions of the selected mapping because information stored in an index is necessary to retrieve and object.

As per claim 15 <u>Vogel</u> is directed to a computer-readable storage medium containing a program which, when executed by a processor, performs operations comprising:

creating an index for the data object, the index comprising one or more index values, each generated based on one or more of the plurality of identifying parameters(column 4, lines 13-16, wherein "reference" means "topography");

Art Unit: 2165

and creating an annotation record containing the annotation and the index for the data object (column 4, lines 18-19, wherein "record" means "final taxonomy").

<u>Vogel</u> does not teach creating an annotation for a data object identified by a plurality of identifying parameters, wherein the identifying parameters identify a location of the data object being annotated

Sommerer teaches creating an annotation for a data object identified by a plurality of identifying parameters, wherein the identifying parameters identify a location of the data object being annotated (page 5, paragraph 0049, lines 3-12).

It would have been obvious to one of ordinary skill in the art at the time the in invention was made to combine the teachings of <u>Vogel</u> with those of <u>Sommerer</u> to creating a record containing the reference and the index for the first data object because keeping the path or URL of a given object (information) is necessary to retrieve it.

As per claim 16 <u>Vogel</u> as modified is directed to creating the index for the data object comprises:

selecting, based on the plurality of identifying parameters, a mapping from a plurality of mappings each containing a different set of mapping functions (column 2, lines 17-23);

and mapping the plurality of identifying parameters to columns of an index table containing the index, according to the mapping functions of the selected mapping (column 2, lines 14-17, wherein "index" means "topical library").

Art Unit: 2165

9. Claims 5-9 are rejected under 35 U.S.C. 103(a) as being obvious over <u>Vogel</u> (US Patent 6,665,681) in view of <u>Sommerer et al.</u> (US 2004/0205514 A1).

As per claim 5 <u>Vogel</u> as modified is directed to a further comprising: creating an annotation corresponding to a data object identified by a plurality of identifying parameters (<u>Vogel</u>, column 4, lines 13-16, wherein "reference" means "topography");

classifying the data object based on the plurality of identifying parameters (<u>Vogel</u>, column 1, lines 36-38);

selecting a mapping, from the plurality of mappings, based on the classification of the data object (Vogel, column 2, lines 17-23);

creating an index for the data object by converting the plurality of identifying parameters to one or more index values, as specified in the mapping (Vogel, column 2, lines 14-17, wherein "index" means "topical library");

and creating a record containing the annotation corresponding to the data object and the index for the data object (<u>Vogel</u>, column 4, lines 18-19, wherein "record" means "final taxonomy").

<u>Vogel</u> as modified still does not teach the use of above steps for second object.

However <u>Vogel</u> does teach the use of above steps for an object.

Art Unit: 2165

It would have been obvious to one of ordinary skill in the art to apply teachings of <a href="Vogel">Vogel</a> to include performing such steps to more than one object because it would make the invention more effective and efficient producing repeatable results.

As per claim 6 <u>Vogel</u> as modified is directed to the first and second data objects are of different types (Vogel, column 3, lines 21-23)

As per claim 7 <u>Vogel</u> as modified is directed to the first and second sets of identifying parameters comprise different numbers of parameters (<u>Vogel</u>, column 2, lines 32-34, wherein "parameters" mean "phrases").

As per claim 8 <u>Vogel</u> as modified is directed to the first object is a sub-object of the second object and the second set of identifying parameters is a subset of the first plurality of identifying parameters (<u>Vogel</u>, column 2, lines 32-34, wherein "parameters" mean "phrases").

As per claim 9 <u>Vogel</u> as modified is directed to the first data object is contained in a text document, wherein the first plurality of identifying parameters includes at least one or more parameters indicating a location and name of the text document (<u>Vogel</u>, column 3, line 31);

Art Unit: 2165

and the second data object is contained in a database table, wherein the second plurality of identifying parameters includes at least one or more parameters indicating a location and name of the database table (<u>Vogel</u>, column 3, lines 10-14).

10. Claims 11-14 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Vogel</u> (US Patent 6,665,681) in view of <u>Sommerer et al.</u> (US 2004/0205514 A1) and in further view of <u>Nakamura et al.</u> (US 2003/0074375 A1).

As per claim 11 <u>Vogel</u> as modified does not teach the mapping functions for each mapping are designed to map a different set of identifying parameters to columns in the index table.

Nakamura et al. does teach the mapping functions for each mapping are designed to map a different set of identifying parameters to columns in the index table (Nakamura et al., page 4, paragraph 0056, lines 14-15; Nakamura et al., page 6, paragraph 0097, lines 7-8, wherein the "parameters" mean "descriptors").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of <u>Vogel</u> with those of <u>Nakamura et al.</u> to include the assignment of parameters to column in a table because it would make retrieval of the parameters faster and easier.

As per claim 12 <u>Vogel</u> as modified still does not teach the mapping functions of at least one of the mappings maps more than one identifying parameter to a single column.

<u>Nakamura et al.</u> does teach the mapping functions of at least one of the mappings maps more than one identifying parameter to a single column (<u>Nakamura et al.</u>, page 3, paragraph 0043, lines 10-13, wherein 'titles of books' are assigned to the same column).

It would have been obvious to one of ordinary skill in the at the time the invention was made to modify the teachings of <u>Vogel</u> with those of <u>Nakamura et al.</u> to include mapping functions of at least one of the mappings maps more than one identifying parameter to a single column because it would make the invention more efficient.

As per claim 13 <u>Vogel</u> as modified still does not teach more than one identifying parameters are mapped to different sets of bytes in the single column.

<u>Nakamura et al.</u> does teach more than one identifying parameters are mapped to different sets of bytes in the single column (<u>Nakamura et al.</u>, page 6, paragraph 0087, lines 24-29, wherein entry declared to be in bytes stored in database or memory).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of <u>Vogel</u> with those of <u>Nakamura et al.</u> to include mapping parameters to different sets of bytes in a column because it would make the search and retrieval faster.

As per claim 14 <u>Vogel</u> as modified still does not teach at least one of the mappings comprises mapping functions for mapping parameters identifying data objects associated with a database to the index table columns;

and at least one of the mappings comprises mapping functions for mapping parameters identifying annotated data objects associated with a text document to the index table columns.

Nakamura et al. does teach at least one of the mappings comprises mapping functions for mapping parameters identifying data objects associated with a database to the index table columns (Nakamura et al., page 4, paragraph 0056, lines 19-22);

and at least one of the mappings comprises mapping functions for mapping parameters identifying annotated data objects associated with a text document to the index table columns (Nakamura et al., page 1, paragraph 0012, lines 120-21, wherein "text document" means "a file"; Nakamura et al., page 2, paragraph 0018).

It would have been obvious to one of ordinary skill in the at the time the invention was made to modify the teachings of <u>Vogel</u> with those of <u>Nakamura et al.</u> to include the mapping of parameters identifying objects associated with database or text document to the index table columns because knowing which columns to access depends on efficient the information was stored. This approach makes the use of index table easier to use.

As per claim 17 <u>Vogel</u> as modified still does not teach the mapping functions for each mapping are designed to map a different set of identifying parameters to columns in the index table.

Nakamura et al. does teach the mapping functions for each mapping are designed to map a different set of identifying parameters to columns in the index table (Nakamura et al., page 4, paragraph 0056, lines 14-15; Nakamura et al., page 6, paragraph 0097, lines 7-8, wherein the "parameters" mean "descriptors").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of <u>Vogel</u> with those of <u>Nakamura et al.</u> to include the assignment of parameters to column in a table because it would make retrieval of the parameters faster and easier.

As per claim 18 <u>Vogel</u> as modified still does not teach the mapping functions of at least one of the mappings maps more than one identifying parameter to a single column.

Nakamura et al. does teach the mapping functions of at least one of the mappings maps more than one identifying parameter to a single column (Nakamura et al., page 3, paragraph 0043, lines 10-13, wherein 'titles of books' are assigned to the same column).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of <u>Vogel</u> with those of <u>Nakamura et al.</u> to include mapping functions of at least one of the mappings maps more than one

Art Unit: 2165

identifying parameter to a single column because it would make the invention more efficient.

As per claim 19 <u>Vogel</u> as modified still does not teach more than one identifying parameters are mapped to different sets of bytes in the single column.

<u>Nakamura et al.</u> does teach more than one identifying parameters are mapped to different sets of bytes in the single column (<u>Nakamura et al.</u>, page 6, paragraph 0087, lines 24-29, wherein entry declared to be in bytes stored in database or memory).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of <u>Vogel</u> with those of <u>Nakamura et al.</u> to include mapping parameters to different sets of bytes in a column because it would make the search and retrieval faster.

11. Claims 20-27 are rejected under 35 U.S.C. 102(e) as being anticipated by <u>Bays</u> et al. (US Patent 6,519,603 B1).

As per claim 20 <u>Bays et al.</u> is directed to a system for managing annotations for different type data objects, comprising:

a processor (column 6, line 21);

Art Unit: 2165

a storage medium containing an annotation database for storing annotation records containing annotations for the different type data objects (column 2, lines 14-17; column 2, 30-32; column 6, line 54);

an index table for storing indexes for the different type data objects, the index having a plurality of columns, each corresponding to a different value of the indexes (column 8, lines 20-26);

a plurality of mappings, each containing functions for mapping a set of identifying parameters for a different type of data object to one or more columns in the index table column 2, lines 61-63)

and an annotation component executable by the processor and configured to receive sets of parameters identifying data objects and, for each set of identifying parameters received, select one of the mappings based on the corresponding set of identifying parameters, and create an index for the first data object by mapping the first set of identifying parameters to columns in the index table, as specified by the mapping functions of the selected mapping (column 3, lines 16-23).

As per claim 21 <u>Bays et al.</u> is directed to at least one of the mappings comprises mapping functions for mapping parameters identifying data objects associated with a database to the index table columns (column 2, lines 52-53, wherein the "parameters" means labels).

Art Unit: 2165

As per claim 22 <u>Bays et al.</u> is directed at least one of the mappings comprises mapping functions for mapping parameters identifying data objects associated with a text document to the index table columns (column 2, lines 52-53, wherein the "parameters" means labels).

As per claim 23 <u>Bays et al.</u> is directed to the annotation component is further configured to:

receive a request for an indication of annotated data objects contained within a document identified by a set of parameters (column 3, lines 48-50);

select one of the mappings based on the set of parameters identifying the document (column 3, lines 41-42);

create an index for the document by mapping the set of parameters identifying the document to columns in the index table as specified by the mapping functions of the selected mapping (column 8, lines 20-26);

search the index table for indexes matching the index created for the document (column 3, lines 61-64, wherein "index" means "pointer information");

convert each index matching the index created for the document, if any, to a set of parameters identifying a corresponding annotated data object ("if any" implies that may not be any therefore it does not have to be covered by any reference);

and return each set of parameters identifying a corresponding data object (column 4, lines 41-43).

Art Unit: 2165

As per claim 24 <u>Bays et al.</u> is directed to the annotation component is further configured to:

receive a request for an indication of annotations associated with a specified data object identified by a set of parameters (column 3, lines 48-50);

select one of the mappings based on the set of parameters identifying the specified data object (column 3, lines 41-42);

create an index for the specified data object by mapping the set of parameters identifying the specified data object to columns in the index table as specified by the mapping functions of the selected mapping (column 8, lines 20-26);

retrieve annotations, if any, for the specified data object, based on the index for the specified data object ("if any" implies that may not be any therefore it does not have to be covered by reference);

and return the annotations (column 4, lines 41-43).

As per claim 25 <u>Bays et al.</u> is directed to retrieving annotations for the specified object comprises:

determining if any indexes in the index table match the index created for the specified data object (column 4, lines 3-7);

and if so, retrieving one or more annotations for the specified data object from the annotation database (column 4, lines 3-7).

As per claim 26 <u>Bays et al.</u> is directed to the annotation component is configured to retrieve annotations for sub-objects of the specified data object (column 4, lines 18-25).

As per claim 27 <u>Bays et al.</u> is directed to the annotation component is further configured to:

receive a request for data objects having annotations satisfying one or more specified conditions (column 3, lines 48-50);

search the annotation database for annotations satisfying the one or more specified conditions (column 3, lines 61-63);

obtain indexes for data objects associated with annotations, if any, satisfying the one or more specified conditions (column 2, lines 34-37);

convert each of the indexes obtained to a set of parameters identifying the associated data object (column 4, lines 41-43);

and return the annotations satisfying the one or more specified conditions and the sets of parameters identifying the associated data objects(column 3, lines 61-63).

## Response to Arguments

12. Applicant's arguments filed 06/09/2006 have been fully considered but they are not persuasive. In response to applicant's argument that Bays does not teach plurality of mappings is not deemed persuasive. Bays reference shows that attributes have a constraint on their data type that is to be consistent with input list. Therefore the

**Art Unit: 2165** 

annotated structure may change with those constraints resulting in multiple structures that could be understood as mappings.

### Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tomasz Ponikiewski whose telephone number is (571)272-1721. The examiner can normally be reached on 8:00-4:30.

Art Unit: 2165

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on (571)272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tomasz Ponikiewski August 24, 2006

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